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     (FILE 'HOME' ENTERED AT 14:04:38 ON 18 SEP 2008)
     FILE 'CA' ENTERED AT 14:05:01 ON 18 SEP 2008
L1   26595 S GEL(1A)PERMEAT?(2A)(CHROMATOG? OR COLUMN) OR GPC OR HPGPC
L2   68900 S (REVERS? PHASE OR RP)(3A)(HPLC OR CHROMATOG? OR COLUMN) OR RPLC
           OR RPHPLC
L3     606 S L1 AND L2
L4       9 S L3 AND(PHA OR PNA OR POLYCYCLIC AROMATIC OR POLYNUCLEAR
           AROMATIC? OR BENZO(1W)PYRENE)
L5      39 S L3 AND(LIPID OR TRIGLYCERIDE OR FATTY ACID)
L6       3 S L3 AND COLUMN(2A)SWITCH?
L7     311 S L1(5A)(INLINE OR ONLINE OR LINE OR DIRECT?)
L8    1430 S L2(5A)(INLINE OR ONLINE OR LINE OR DIRECT?)
L9       1 S L7 AND L8
L10     72 S L1-2 AND MULTI DIMENSIONAL
L11     34 S L3 AND (OIL OR FAT OR BUTTER OR MARGARINE OR MILK OR EDIBLE)
L12     38 S L1-2 AND MULTI DIMENSIONAL(5A)CHROMATOG?
L13     23 S L10 AND(AUTOMAT? OR ONLINE OR INLINE OR LINE)
L14     10 S L1(5A)(ONLINE OR INLINE OR LINE OR COUPL? OR TRANSFER? OR
           INJECT?)(5A)L2
L15    131 S L4-6,L9,L11-14
L16     98 S L15 AND PY<2004
L17      9 S L15 NOT L16 AND PATENT/DT
L18    107 S L16-17

=> d bib,ab l18 1-107

L18  ANSWER 59 OF 107  CA  COPYRIGHT 2008 ACS on STN
AN   118:79596  CA
OREF 118:13987a,13990a
TI   Determination of sulfadimethoxine, sulfamethoxazole, trimethoprim and
     their main metabolites in lung and edible tissues from pigs by multi-
     dimensional liquid chromatography
AU   Mengelers, M. J. B.; Polman, A. M. M.; Aerts, M. M. L.; Kuiper, H. A.;
     Van Miert, A. S. J. P. A. M.
CS   Qual. Control Agric. Prod., State Inst., Wageningen, 6700 AE, Neth.
SO   Journal of Liquid Chromatography (1993), 16(1), 257-78
AB   An HPLC method was developed to investigate the tissue distribution of
     sulfadimethoxine, sulfamethoxazole, trimethoprim, and their main
     metabolites in lung and edible tissues from pigs.  The sample
     pretreatment consisted of a simple extn. with an aq. buffer soln.  The
     filtered ext. was injected onto a liq. chromatog. system with an online
     gel-permeation column, small preconcn. column, reversed-phase anal.
     column, and UV-detection.  Recoveries of parent compds. and their
     metabolites is spiked lung, muscle, kidney, and liver tissues were
     const. and varied between tissues from 60 to 85%.  Detection limits in
     the tissues were 10-50 ng/g tissue.  Application of the method for the
     anal. of drug residues in tissue samples from treated pigs is described.

L18  ANSWER 68 OF 107  CA  COPYRIGHT 2008 ACS on STN
AN   114:16848  CA
OREF 114:2855a,2858a
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TI Sequential analysis
AU Bidlingmeyer, Brian A.; Ekmanis, Juris L.
CS Waters Chromatogr. Div., Millipore Corp., Milford, MA, USA
SO LC-GC (1990), 8(5), 352, 354-6
AB Small-mol. gel permeation chromatog. (SMGPC) was used as the initial sequential anal. method for the sepn. of complex mixts. such as tropane alkaloids in plant exts., and herbicide and pesticide residues in tissue exts. SMGPC was coupled with other chromatog. modes for these sepns., viz., liq.-solid adsorption chromatog., reversed-phase liq. chromatog., and gas chromatog. Automated sequential anal. is also possible using valve switching.

L18 ANSWER 79 OF 107 CA COPYRIGHT 2008 ACS on STN
AN 110:9881 CA
OREF 110:1773a,1776a
TI Use of two-dimensional liquid chromatography in the analysis of additives in cellulose acetate polymer
AU Floyd, T. R.
CS Eastman Chem. Div., Kingsport, TN, 37662, USA
SO Chromatographia (1988), 25(9), 791-6
AB The capability of elution-elution multidimensional liq. chromatog. was investigated. A column scaling approach was evaluated for the quantification of low-mol.-wt. additives in cellulose acetate. A small-bore (1-mm inside diam.) gel-permeation column was used to sep. the higher-mol.-wt. polymer from the lower-mol.-wt. components. Once sepd. these additives were transferred to a C18 reversed-phase column via a switching valve. The reversed-phase system successfully sepd. and quantified individual additives. Anal. time for an UV inhibitor, Tinuvin P, in cellulose acetate, including re-equilibration, was ~30 min. Both accuracy and precision were good. Precision over a 3-day period was ~1.5%.

L18 ANSWER 89 OF 107 CA COPYRIGHT 2008 ACS on STN
AN 104:219244 CA
OREF 104:34601a,34604a
TI A full-automatic multi-dimensional HPLC-assay for routine estimation of cortisol in serum and urine
AU Kage, A.; Weber, B.; Schoeneshoefer, M.
CS Klin. Charlottenburg, Free Univ. Berlin, Berlin, D-1000/19, Fed. Rep. Ger.
SO Analytical Chemistry Symposia Series (1985), 23(Adv. Steroid Anal. '84), 507-10
AB Cortisol [50-23-7] was detd. in urine and serum without manual pre-extn. by a multidimensional HPLC procedure with reversed-phase C18 material as stationary phase. UV detection was performed. Sensitivity was <20 nM, and recovery was ~95%.

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     (FILE 'HOME' ENTERED AT 12:02:53 ON 18 SEP 2008)
     FILE 'CA' ENTERED AT 12:03:01 ON 18 SEP 2008
L1   26595 S GEL(1A)PERMEAT?(2A)(CHROMATOG? OR COLUMN) OR GPC OR HPGPC
L2     102 S L1 AND (COLUMN(1A)SWITCH? OR (DIRECT? OR ONLINE)(3A)(COUPL? OR
           TRANSFER? OR CLEANUP OR CLEAN UP))
L3   26084 S (REVERSE PHASE OR RP)(3A)(HPLC OR CHROMATOG?) OR RPLC OR RPHPLC
L4       6 S L2 AND L3
L5     214 S L3 AND (COLUMN(1A)SWITCH? OR (DIRECT? OR ONLINE)(3A)(COUPL? OR
           TRANSFER? OR CLEANUP OR CLEAN UP))
L6      62 S L2 AND (ONLINE OR AUTOMAT?)
L7       3 S L5 AND(PHA OR PNA OR POLYCYCLIC AROMATIC OR POLYNUCLEAR
           AROMATIC?)
L8      45 S L6 AND PY<2004
L9       0 S L6 NOT L8 AND PATENT/DT
L10    285 S L1 AND L3
L11      3 S L10 AND(PHA OR PNA OR POLYCYCLIC AROMATIC OR POLYNUCLEAR
           AROMATIC?)
L12     56 S L4,L7-8,L11

=> d bib,ab,kwic l12 1-56

L12  ANSWER 39 OF 56  CA  COPYRIGHT 2008 ACS on STN
AN   120:94437  CA
OREF 120:16557a,16560a
TI   Method and apparatus for determination of pyridinolines
IN   Yoshimura, Yoshinobu; Oonishi, Koji; Hirose, Misako
PA   Takeda Chemical Industries Ltd, Japan
SO   Jpn. Kokai Tokkyo Koho, 7 pp.
PI   JP 05209870          A     19930820    JP 1992-16071          19920131
     JP 3179163           B2    20010625
PRAI JP 1992-16071                19920131
AB   The title method involves introducing a sample contg. pyridinolines into
     a pretreatment column (gel permeation column) having a different mode
     from that of an anal. column and by column switching corresponding to
     the retention time the fraction is introduced into an anal. column for
     carrying out HPLC.  The title app. is also claimed.

L12  ANSWER 56 OF 56  CA  COPYRIGHT 2008 ACS on STN
AN   89:2511  CA
OREF 89:467a,470a
TI   Two-dimensional column liquid chromatographic technique for resolution
     of complex mixtures
AU   Erni, F.; Frei, R. W.
CS   Pharm. Dep., Sandoz Ltd., Basel, Switz.
SO   Journal of Chromatography (1978), 149, 561-9
AB   The improvement of a given high-performance liq. chromatog. (HPLC)
     system (better selectivity, a; more theor. plates, N) in order to be
     able to handle complex sepn. problems is often tedious and costly.  The
     possible alternatives may be gradient elution or column-switching
     techniques, but they do not always lead to the desired effects.  A 2-
     dimensional HPLC sepn. technique (similar to the well known 2-
     dimensional thin-layer chromatog.), which permits the use of 2 different
     sepn. mechanisms, would often be highly desirable.  The possibilities of
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such an HPLC device was investigated. It consists of a 1st column filled with gel permeation chromatog. (GPC) material, which is coupled via a loop device with a 2nd column contg. reversed-phase material. Such a device permits the on-line collection of fractions from the 1st-column and direct injection into the 2nd chromatog. system. The size of the fractions in the 1st-sepn. is flexible and is controlled by the frequency of injection onto the 2nd column. By exploiting pre-concn. phenomena on the 2nd, reversed-phase column, fractions of several mL can be collected and injected without a loss in resoln. in the followng chromatog. step. The 2nd sepn. (2nd dimension) can even be coupled with a solvent gradient for further sepn. enhancement. The combination of GPC and reversed-phase chromatog. was used for the sepn. of complex plant exts. Seven fractions with vols. of ~1.5 mL/fraction were subjected to the reversed-phase sepn. in the 2nd-dimension. The sequences for fraction collection and re-injection are automatically controlled. The aim of this investigation was to obtain a better sepn. and more information on a mixt. of senna glycosides.

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